

CLAIMS

1. For a turbine generator or pump having main bearings separated by a span of shaft and a thrust equalizing mechanism adjacent one of said main bearings, an improvement comprising a stationary spacer interposed between the thrust equalizing mechanism and its adjacent main bearing to reduce the span between said main bearings.
2. The improvement according to claim 1 wherein the spacer is composed of material that shrinks less than the shaft of the generator.
3. The improvement according to claim 1 wherein the height of the spacer is selected according to desired thrust equalizing mechanism operating parameters over a temperature range.
4. The improvement according to claim 2 wherein the height of the spacer is selected according to desired thrust equalizing mechanism operating parameters over a temperature range.
5. For a turbine generator or pump having main bearings separated by a span of shaft and a thrust equalizing mechanism which includes a stationary thrust plate adjacent one of the main bearings and a variable orifice defined between the thrust plate and a throttle plate affixed to the shaft, an improvement comprising a stationary length compensator interposed between the thrust plate and its adjacent main bearing to space said adjacent main bearing from the thrust plate in order to reduce the span between said main bearings.

6. The improvement according to claim 5 wherein the length compensator is composed of material that shrinks less than the shaft of the generator.
7. The improvement according to claim 5 wherein the heights of the thrust plate and the length compensator are selected to produce a desired variable orifice over a range of operating temperatures.
8. The improvement according to claim 6 wherein the heights of the thrust plate and the length compensator are selected to produce a desired variable orifice over a range of operating temperatures.
9. For a turbine generator or pump having main bearings separated by a span of shaft and a thrust equalizing mechanism which includes a stationary thrust plate adjacent one of the main bearings, an improvement comprising stationary means interposed between the thrust plate and its adjacent main bearing to space said adjacent main bearing from the thrust plate in order to reduce the span between said main bearings.
10. The improvement according to claim 9 wherein said means is composed of material that shrinks less than the shaft of the generator.
11. The improvement according to claim 9 wherein the height of said means is selected according to desired thrust equalizing mechanism operating parameters over a temperature range.

12. The improvement according to claim 10 wherein the height of said means is selected according to desired thrust equalizing mechanism operating parameters over a temperature range.